CHAPTER 25

LPU-32/P LIFE PRESERVER ASSEMBLY

Section 25-1. Description

25-1. GENERAL.

WARNING

The LPU-32/P life preserver is not suitable for use by small children in Naval aircraft.

25-2. The LPU-32/P life preserver assembly is authorized for use by passengers and troops in helicopter or transport type aircraft for sea survival situations. It is designed such that one size fits all.

25-3. CONFIGURATION.

25-4. The LPU-32/P Life Preserver Assembly consists of a Life Preserver Yoke Assembly in addition to the survival items: a sea-dye marker, a whistle, and a chemlite; each of which must be ordered separately to make up the complete system. The LPU-32/P Life Preserver Assembly weighs approximately 4 pounds and provides a minimum of 40 pounds of buoyancy. It consists of flotation assembly, two inflators, and a casing cover assembly, which includes the belt assembly and the survival items pouch. Donning or doffing does not require the removal of personal effects such as helmets, eyeglasses, etc. See Figures 25-1 and 25-2.

25-5. The dual-cell, yoke-type flotation assembly is constructed of a heat-sealed polyurethane-coated nylon cloth. A fire-retardant, aramid cloth (MIL-C-83429, TYP II, Sage Green # 1590) casing protects the bladder. It is equipped with an oral inflation tube, a check valve, and a manifold stem assembly.

25-6. The waist belt assembly consists of an adjustable belt made of nylon webbing, a nylon slide (loop-loc), a triglide, and side release. A 12-inch locally manufactured extension belt is authorized for use with winter garments, battle dressed troops or larger passengers. See paragraph 25-65A for extension belt assembly instructions.

25-7. The LPU-32/P Life Preserver inflation assembly consists of two Type III (MIL-C-601G) 16 gram CO_2 cylinders and inflators. Each inflator is connected and secured to the valve stem on the flotation assembly with a cap nut; gaskets prevent leaking between valve stem, inflator, CO_2 cylinder and cap nut. The manifold stem is equipped with a check valve to prevent leakage.

25-8. The survival items pouch consists of fire-retardant aramid cloth (MIL-C-83429) same as the casing, two pull slide-fasteners and two grommets for the securing of survival items. The survival items include a sea-dye marker, a whistle, and a chemlight with attached lanyard. See table 25-1 for survival items.

25-9. APPLICATION.

25-10. The LPU-32/P is the preferred passenger life preserver, it will replace the LPP-1, -1A and the Pouch Type Life Preserver as assets become available.

25-11. FUNCTION.

25-12. The LPU-32/P is manually inflated by pulling both of the beaded handles down. Emergency use of the survival items shall be as required. In an emergency situation, the oral inflation tube should be used to top-off an inflated preserver, maintain inflation of a leaky preserver or to inflate a preserver when the CO_2 actuated inflator malfunctions or fails. The oral inflation tube is also used to inflate a preserver with air during an inspection test and to deflate a preserver in preparation for packing, or to relieve excess pressure.

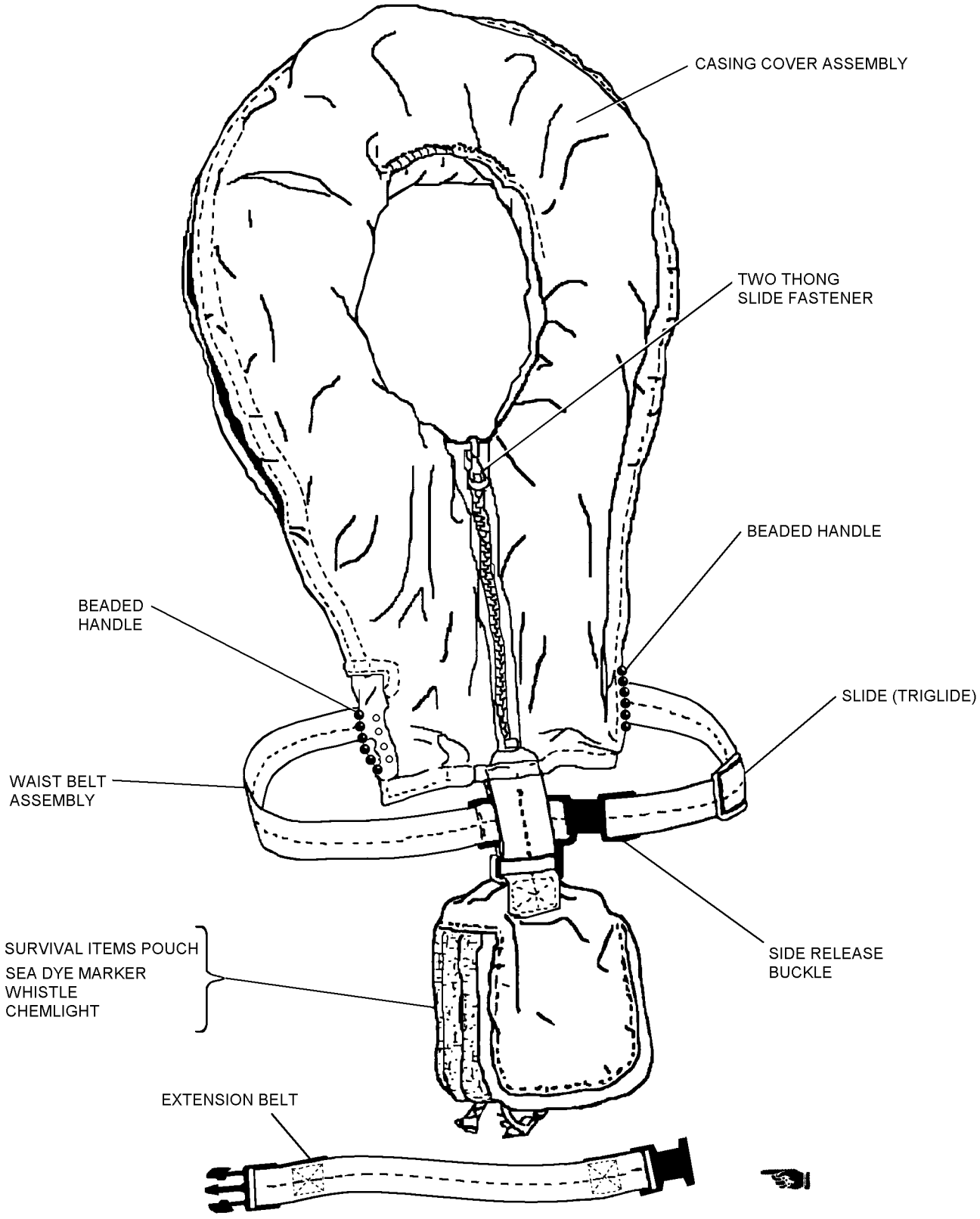

Figure 25-1. LPU-32/P Life Preserver Assembly, Parts Nomenclature

Table 25-1. LPU-32/P Survival Items

Description	Quantity Required	Reference Number	NIIN	SM&R Code
Whistle, Type II or Fox 40	1	MIL-W-1053 Open Purchase	00-254-8803	PAOZZ
Chemical Light	1	95277-80 (CAGE 83289)	01-334-4274	PAOZZ
Dye Marker	1	MIL-S-17980 (CAGE 81349)	00-270-9986	PAOZZ

Notes: 1. The Passenger Helicopter Aircrew Breathing Device System (PHABD) is authorized for use on the LPU-32/P for Marine troop passengers during flights over water. Refer to NAVAIR 13-1-6.5 for attachment and maintenance procedures.

25-13. DONNING PROCEDURE.

25-14. To don the LPU-32/P life preserver, refer to Figure 25-2 and proceed as follows:

NOTE

Donning does not require removal of helmet or other personal effects. The LPU-32/P is designed to be worn either way, there is no front or back.

1. Unzip LPU-32/P all the way and place over head.

2. Fasten buckle, adjust belt. Passengers in winter garments, battle dressed troops or larger passengers may require the use of a locally manufactured extension belt. See paragraph 25-65A for extension belt assembly instructions.

3. Zip up all the way.

4. Inflate preserver by pulling both beaded handles down or by using oral inflation valves.

NOTE

Either zipper on survival items pouch may be used to remove survival items, as required.

Section 25-2. Modifications

25-15. GENERAL.

25-16. There are no authorized modifications to the LPU-32/P life preserver at this time. Common repair and fabrications to maintain serviceability are listed in table 25-2.

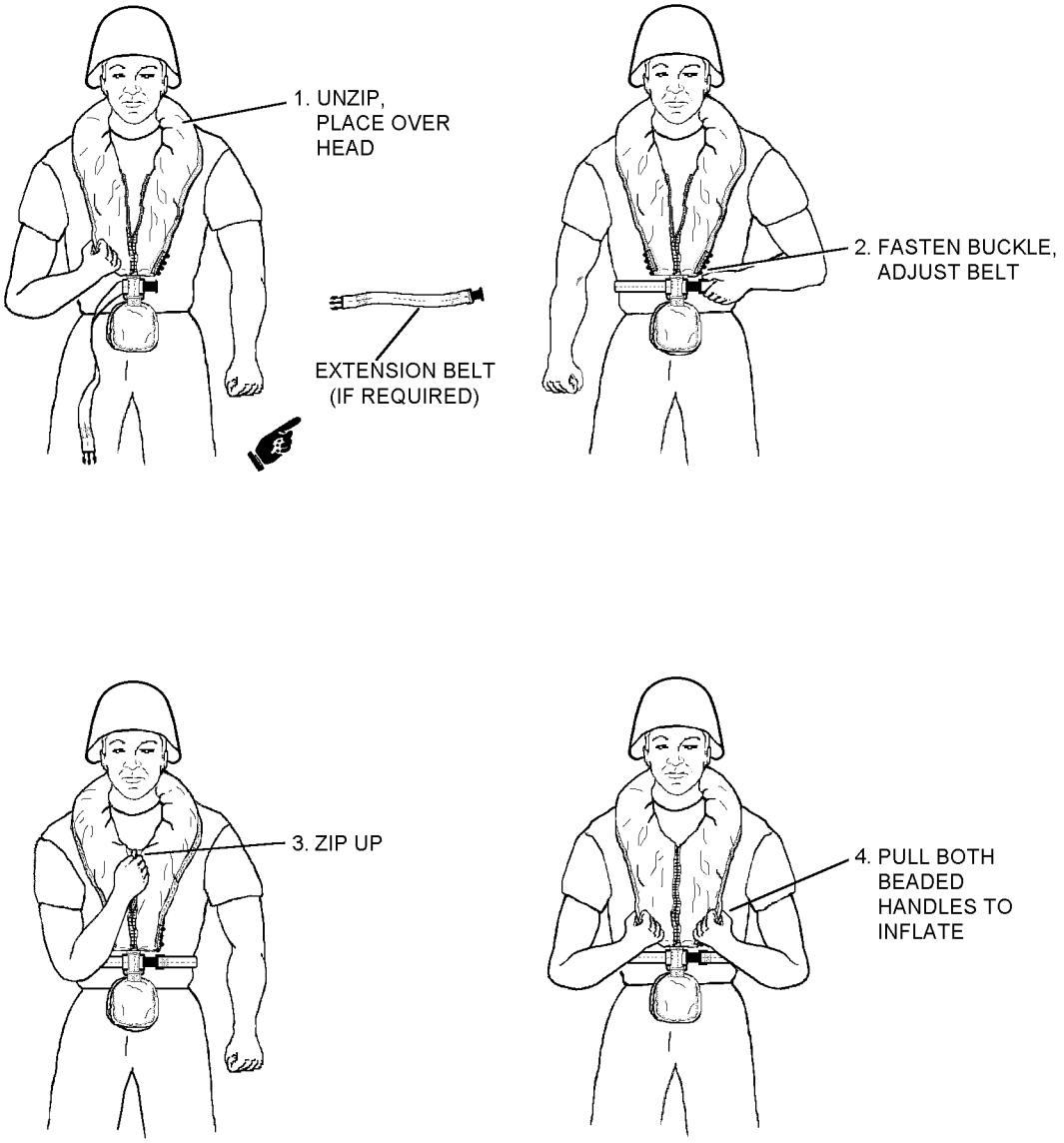

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Figure 25-2. Donning Procedures

Table 25-2. LPU-32/P Common Repairs and Fabrications

Description of Repair or Fabrication	Paragraph Number
Determination of Repairability	25-50
Casing Repair Procedures	25-52
Casing Grommet Replacement	25-53
Cementing Life Preserver	25-54
Patching Life Preserver	25-55
Replacement of Oral Inflation Valve	25-56
Recementing of Bladder Fin Seams	25-57
Fastener Replacement	25-58
Disassembly of Life Preserver	25-59
Reassembly of Life Preserver	25-60
Replacement of Beaded Inflation Handle Assembly	25-61
Repair of Corroded CO_2 Inflation Valve	25-62
Replacement of Top and Bottom Gaskets	25-63
Replacement of Check Valve Assembly	25-64
Fabrication of Protective Cover Assembly	25-65
Fabrication of Extension Belt Assembly	25-65A

Section 25-3. Maintenance

25-17. GENERAL.

25-18. This section contains information on inspection, disassembly, repair/replacement, testing, and reassembly of the LPU-32/P Life Preserver.

25-19. INSPECTION.

25-20. All life preservers shall be subjected to Daily, Special, and 224-Day Special Inspections.

25-21. The Daily Inspection shall be performed on life preservers installed in aircraft prior to each flight by assigned aircrewmembers.

25-22. The Special Inspection shall be performed on all aircraft installed life preservers at intervals not to exceed 28 days. The inspection shall be performed at the organizational level of maintenance by personnel assigned to the Aviator's Equipment Branch.

25-23. Upon completion of the inspection, make necessary entries on appropriate form in accordance with OPNAVINST 4790.2 Series. The 28-Day Special Inspection may be recorded on a separate history card from the history card recording 224-Day Special Inspections, functional checks, and modifications.

25-24. The 224-Day Special Inspection shall be performed on all life preservers prior to placing in service. The Inspection cycle thereafter shall be as follows: personal issue life preservers shall be inspected once every 90 days. Aircraft-installed life preserver inspection shall coincide with the inspection cycle of the aircraft in which installed. See applicable Planned Maintenance System (PMS) publications for specific intervals. In no case shall the interval exceed 231 days. Unless operational requirements demand otherwise, the life preserver 224-Day Special Inspection shall be performed by the intermediate level of maintenance or above. The functional test shall be performed prior to placing in service, every fourth inspection cycle thereafter, and whenever an inflation assembly is replaced. The leakage test shall be performed during every inspection cycle. If inspection indicates damage, complete appropriate forms in accordance with OPNAVINST 4790.2 Series and forward entire assembly to supply. Refer to paragraph 25-50 for determination of repairability.

25-25. QUALITY ASSURANCE. Properly detailed procedures present a logical sequence for the inspection process. The more critical procedures are underlined to designate steps which require a Quality Assurance inspection to assure performance of specific requirements. After the underlined step is performed by the Aircrew Survival Equipmentman, the procedure shall be verified before the next step is performed. This verification shall be performed by a Collateral Duty Inspector or Quality Assurance Representative (CDI, CDQAR, or QAR). Work Center supervisors are primarily responsible for quality assurance within their centers. OPNAVINST 4790.2 Series permits supervisors to nominate their more experienced personnel to serve as quality assurance inspectors. Nominated personnel shall be screened and examined by the Quality Assurance Officer prior to their designation as Quality Assurance Inspectors or Quality Assurance Representatives by the Commanding Officer. Under no circumstances shall an Aircrew Survival Equipmentman perform his own quality assurance inspection.

25-26. DAILY/28-DAY SPECIAL INSPECTION. To perform a Daily/28-Day Special Inspection, proceed as follows:

WARNING

Ensure that the beaded inflation handles are readily accessible. The beaded inflation handles shall be secured with four snap fasteners to the life preserver end flap.

CAUTION

Do not open any sealed or safety-wired/safety tied portions of preserver for Daily/28-Day Special Inspection.

1. Inspect exposed metal parts for corrosion and damage.

2. Inspect seams and harness for wear, snags, tears and abrasions.

3. Inspect for presence of survival items, security of attachment and, if applicable, operation.

4. Inspect casing fabric for cuts, tears, abrasions, security of stitching, and other damage.

5. Inspect hook and pile tape for secure attachment and stitches.

6. Inspect safety ties on beaded inflation handles. The beaded inflation handle safety ties may be replaced without removing the life preserver from service.

7. Inspect buckles, triglides, and snap fasteners for presence, security of attachment, corrosion, and ease of operation.

8. Adjust and don preserver to ensure proper fit.

9. If any discrepancy is noted, the preserver shall be removed from service and repaired in accordance with paragraph 25-47.

25-27. ACCEPTANCE/224-DAY SPECIAL INSPECTION. The Acceptance/224-Day Special Inspection consists of the following tasks:

1. Beaded Inflation Handle Inspection, paragraph 25-28.

2. Casing/Pouch Inspection, paragraph 25-29.

3. Functional Test (every fourth inspection cycle), paragraph 25-30.

4. Visual Inspection, paragraph 25-32.

5. Life Preserver Configuration, paragraph 25-33.

6. General Inspection, paragraph 25-34.

7. Markings Inspection, paragraph 25-35.

8. Survival Items Inspection, paragraph 25-36.

9. Inflation Assembly Inspection, paragraph 25-37.

10. Beaded Inflation Handle Pull Test, paragraph 25-38.

11. Leakage Test, paragraph 25-39.

12. Records Updating, paragraph 25-42.

13. Packing, paragraph 25-66.

25-28. BEADED INFLATION HANDLE INSPECTION. Inspect beaded inflation handle for the following:

1. Attachment of inflation lanyard to beaded handle.

2. Corrosion on snap fasteners and ease of operation.

3. Cuts, tears, deterioration, abrasion, stains, and general cleanliness of lanyard.

4. Presence of safety tie on beaded inflation handle.

25-29. CASING AND POUCH INSPECTION. To inspect casing and/or pouches, proceed as follows:

1. Inspect fabric for cuts, tears, deterioration, abrasion, stains, and general cleanliness.

2. Inspect seams for proper adhesion or stitching.

3. Inspect straps and loops for security and wear.

4. Inspect any other parts for wear, damage, and security.

5. All hardware for security of attachment, corrosion, damage, wear and, if applicable, ease of operation.

6. If any discrepancies are found, the case, container, or pouch shall be repaired or removed from service as deemed appropriate by the inspection activity.

25-30. FUNCTIONAL TEST. To perform a functional test, proceed as follows:

CAUTION

Ensure area surrounding preserver is free of foreign objects.

1. Completely open preserver casing prior to conducting functional test. Preserver shall be completely unfolded and laid out flat.

2. Actuate both inflation assemblies.

3. The preserver shall fully inflate to design shape, without evidence of restriction, in less than 30 seconds.

4. If preserver does not properly inflate, determine cause. Ensure stems and valves are clean and free of foreign matter.

5. If correction is made, the preserver shall be functionally tested again.

6. Deflate preserver in accordance with paragraph 25-31 to remove all CO_2.

25-31. DEFLATION. To deflate a life preserver, proceed as follows:

Support Equipment Required

Quantity	Description	Reference Number
1	Pump, Rotary Vacuum (or equivalent)	NIIN 00-052-5015 (90567)
As Required	Hose, 3/8 or 1/2 inch Inside Diameter, Rubber	—

1. Attach one end of rubber hose to vacuum pump.

2. Deflate through oral inflation valve. Hold vacuum pump hose against end of oral inflation valve. When compartment is collapsed, release oral inflation valve.

25-32. VISUAL INSPECTION. Prior to visually inspecting a life preserver assembly, the life preserver shall be inflated with air to 1.0 psig.

CAUTION

Remove all carbon dioxide cylinders prior to inflating life preserver with air.

NOTE

If suitable air source is not available, water-pumped nitrogen (BB-N-411) may be substituted.

25-33. LIFE PRESERVER CONFIGURATION. The life preserver shall be updated by comparing it to the illustrations in figure 25-1 and Section 25-4, Illustrated Parts Breakdown.

25-34. GENERAL INSPECTION. Examine life preservers for the following:

1. Preserver fabric for cuts, tears, punctures, deterioration and abrasion. Refer to paragraph 25-52 for repair instructions.

2. Seams for proper adhesion. Refer to paragraph 25-57 for repair instructions.

3. Valve inlet stems for security.

4. Oral inflation valve(s) for cracks, security, ease of operation, and corrosion.

5. Patches for proper adhesion and wear. Refer to paragraph 25-55 for repair instructions.

6. Any other parts for wear or other damage.

7. All hardware for security of attachment, corrosion, damage, wear and, if applicable, ease of operation.

8. Preservers for stains, dirt, and general cleanliness. Refer to paragraph 25-43 for cleaning instructions.

9. Cross threading and/or loose manifold nuts.

25-35. MARKINGS INSPECTION. To inspect and restore marking, proceed as follows:

Materials Required

Quantity	Description	Reference Number
As Required	Ink, Marking, Laundry, Black	SPE-92 NIIN 00-161-4229
	-or-	
As Required	Ink, Drawing, Waterproof, Yellow	A-A-59291 NIIN 00-634-6583

1. Compare markings on preserver to those listed in table 25-3.

2. Restore any faded markings.

3. Correct any markings which do not agree with the applicable table. Paint out old marking and enter new marking as close to proper position as possible.

25-36. SURVIVAL ITEMS INSPECTION. To inspect survival items, proceed as follows:

1. Inventory all items by checking items against table 25-1. Replace any missing or unsatisfactory item.

Table 25-3. LPU-32/P Life Preserver Markings

Marking (Note 1)	Location	Letter Height
FLOTATION ASSY (LPU-32/P) 30003/3335AS104 MFR'S IDENT. [applicable number] CONTR. NO. [applicable number] SERIAL NO. [applicable number] DATE OF MFR [month and year]	Lower right side of flotation assembly	5/16 inch 3/16 inch
Notes: 1. Replacement markings shall be stamped or stenciled using waterproof black ink.		

NOTE

NAVAIR 13-1-6.5, Rescue and Survival Equipment contains detailed information on the inspection of survival items.

2. Inspect all items for damage, spent contents and expired service life. Replace as necessary.

3. Operate all items which are not intended for one-time use. Replace as necessary.

25-37. INFLATION ASSEMBLY INSPECTION. To inspect life preserver inflation assemblies, proceed as follows:

1. Remove CO_2 cylinders from inflation assemblies.

2. Examine inflation device, actuating lever and lanyard, and beaded inflation handles for fraying, corrosion, stripped threads, and other damage.

3. If required, remove any sharp edges from valve with a fine round file.

4. Operate actuating lever several times. Ensure that lever moves freely and ensure that piercing pin moves properly inside valve body. Inspect point of piercing pin for serviceability. If point is flat, rounded, dull, or otherwise worn or damaged, replace inflation assembly.

NOTE

Each time inflation assembly gaskets or inflation assembly is removed and replaced for any reason, a functional test shall be conducted. Refer to paragraph 25-30. Use new gaskets when replacing device.

5. If any discrepancy is noted in device that is not repairable in accordance with paragraph 25-50, remove assembly and install a new inflation device.

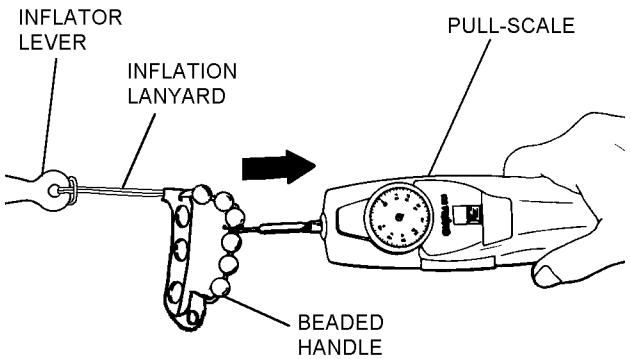
25-38. BEADED INFLATION HANDLE PULL TEST. To perform the beaded inflation handle pull test, proceed as follows:

Support Equipment Required

Quantity	Description	Reference Number
1	Gage, Dial, Push/Pull, 0 to 50 lb	DPPH50 or equivalent

1. Ensure that CO_2 cylinders have been removed. Actuate the inflator assembly. All snap fasteners on beaded inflation handle must be fully engaged.

2. Attach gage to webbing between third and fourth bead on inflation handle.



Step 2 - Para 25-38

3. Hold inflator steady. Slowly exert a 25 pound straight pull on webbing. All snap fasteners should release at or before 25 pounds.

4. If all snap fasteners do not release at or before the 25 pound limit, replace the entire beaded inflation handle. Repeat steps 1 thru 4.

5. If the snap fasteners release properly, examine the lanyard for frays, ruptures, thin spots, split casing, and security of stitches and knots. If unsatisfactory, replace the entire beaded inflation handle. Refer to paragraph 25-61.

25-39. LEAKAGE TEST. All life preservers shall be subjected to a leakage test each 224-Day Special Inspection. To perform a leakage test proceed in accordance with paragraph 25-41.

25-40. Test Fixture. The test fixture, consisting of a three way valve, pressure gauge, and adapters for compartments being tested, shown in Chapter 3, will not work on the oral inflation valves used on the LPU-32/P.

Figure 25-3. Deleted

25-41. Test Procedure. To test life preservers, proceed as follows:

Support Equipment Required

Quantity	Description	Reference Number
1	Gage, Pressure, Dial Indicating 0-5 psi	(CAGE 61349) NIIN 00-087-3143
	-or-	
1	Gage, Pressure, Dial Indicating 0-15 psi	(CAGE 70462) NIIN 00-942-8127

Materials Required

Quantity	Description	Reference Number
As Required	Chalk Marking	NIIN 00-164-8893 White or NIIN 00-223-6707 Yellow

CAUTION

Ensure test area is free of foreign objects.

1. Ensure all carbon dioxide has been removed from any preserver which has been functionally tested.

CAUTION

Damage may occur to oral inflation valve if air supply pressure entering the life preserver exceeds ten (10) psi during this test.

NOTE

If a suitable air source is not available, water-pumped nitrogen (BB-N-411) may be substituted.

Due to construction of the LPU-32/P, each bladder must be leak checked separately.

2. Lay vest on flat surface with bladders exposed. Using chalk mark the top center of the exposed bladder side A. Turn vest to opposite side and mark in same location side B. Inflate bladder side a through oral inflation tube to a test pressure of 2.0 psig. Use pressure gage to verify correct pressure.

3. After a minimum of 15 minutes the pressure shall be checked and readjusted, if necessary, to the test pressure of 2.0 psig. Record current time.

4. Disconnect air supply and check for leaks. Ensure all valves are closed.

5. Record temperature and barometric pressure.

6. After a minimum of four hours from the time recorded in step 3, measure pressure in chamber being tested using pressure gage and record. Acceptable pressure shall not be less than 1.6 psig after applying adjustments in step 7.

7. Record temperature and barometric pressure and correct test pressure for any changes in temperature and barometric pressure. Refer to tables 25-4 and 25-5.

EXAMPLE

UNCORRECTED TEST READING 1.70 PSI

	TEMP.	BARO.
START	75° F	29.90 IN. Hg
END	70° F	29.70 IN. Hg
DIFFERENCE	- 5° F	-0.20
CORRECTION	+0.155	-0.098

TEMP. CORRECTION	+ 0.155
+ BARO. CORRECTION	- 0 .098
CORRECTION	+ 0 .057

UNCORRECTED READING	1.700 PSI
+ CORRECTION	+ 0.057
CORRECTED READING	1.757 PSI

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Step 7 - Para 25-41

Table 25-4. Temperature Conversion Chart

Temperature Difference (F°)	Correction (psi)
1	0.031
2	0.062
3	0.093
4	0.124
5	0.155
6	0.186
7	0.217
8	0.248
9	0.279
10	0.310
Rise in temperature: subtract from gage reading. Fall in temperature: add to gage reading.	

8. If pressure of chamber is below 1.6 psig inflate to leakage test pressure and coat with a soap solution to locate leaks. Mark leak areas. Rinse preserver with fresh water, air dry and repair in accordance with paragraph 25-55.

9. Deflate preserver in accordance with paragraph 25-31.

9A. Repeat steps 2 thru 9 for bladder B.

10. Ensure that inflation valve lever is cocked. Install CO_2 cylinder in accordance with paragraph 25-46.

25-42. RECORDS UPDATING. Make necessary entries on appropriate form in accordance with OPNAVINST 4790.2 Series.

25-43. CLEANING AND SERVICING.

25-44. Cleaning and servicing consist of cleaning the bladder case, and/or pouch, and installation of CO_2 cylinders.

25-45. CLEANING OF LIFE PRESERVER CASINGS/BLADDERS. To clean life preservers, machine washing is preferred on casings and pouches. Alternate method is by hand. Remove any survival items and other detachable items and proceed as follows:

Materials Required

Quantity	Description	Reference Number
As Required	Detergent, General Purpose	MIL-D-16791 NIIN 00-282-9699
As Required	Cloth, Lint-Free, Type II	MIL-C-85043 NIIN 00-044-9281
As Required	Talc, Technical	MIL-T-50036A NIIN 01-080-9589

CAUTION

Solvents are not to be used in cleaning life preservers.

1. Prepare solution of detergent (MIL-D-16791) consisting of 1/4 to 1/2 ounce of detergent per gallon of water.

2. Apply cleaning solution to soiled area with a spray or sponge.

Table 25-5. Barometric Pressure Conversion Chart

Press. Diff. (inHG)	Corr. (psi)	Press. Diff. (inHG)	Corr. (psi)	Press. Diff. (inHG)	Corr. (psi)	Press. Diff. (inHG)	Corr. (psi)	Press. Diff. (inHG)	Corr. (psi)
0.01	0.005	0.16	0.078	0.31	0.152	0.46	0.225	0.61	0.299
0.02	0.010	0.17	0.083	0.32	0.157	0.47	0.230	0.62	0.304
0.03	0.015	0.18	0.088	0.33	0.162	0.48	0.235	0.63	0.309
0.04	0.020	0.19	0.093	0.34	0.167	0.49	0.240	0.64	0.314
0.05	0.025	0.20	0.098	0.35	0.172	0.50	0.245	0.65	0.319
0.06	0.030	0.21	0.103	0.36	0.176	0.51	0.250	0.66	0.323
0.07	0.035	0.22	0.108	0.37	0.181	0.52	0.254	0.67	0.328
0.08	0.040	0.23	0.113	0.38	0.186	0.53	0.260	0.68	0.333
0.09	0.045	0.24	0.118	0.39	0.191	0.54	0.265	0.69	0.338
0.10	0.049	0.25	0.123	0.40	0.196	0.55	0.270	0.70	0.343
0.11	0.054	0.26	0.127	0.41	0.201	0.56	0.275	0.71	0.348
0.12	0.060	0.27	0.132	0.42	0.206	0.57	0.279	0.72	0.353
0.13	0.064	0.28	0.137	0.43	0.211	0.58	0.284	0.73	0.358
0.14	0.069	0.29	0.142	0.44	0.216	0.59	0.289	0.74	0.363
0.15	0.073	0.30	0.147	0.45	0.221	0.60	0.294	0.75	0.368

Rise in pressure: add to gage reading.
Fall in pressure: subtract from gage reading.

3. Allow solution to remain on surface for several minutes, then agitate with a soft brush or rag.

4. Rinse surface thoroughly with water; wipe with a cloth or sponge. Repeat this application until surface is free from all solution.

5. Dry casing before use and dry bladder with a lint-free cloth (MIL-C-85043). Apply a light coating of talc (MIL-T-50036A).

25-46. INSTALLATION OF CO_2 CYLINDERS. To install CO_2 cylinders, proceed as follows:

Support Equipment Required

Quantity	Description	Reference Number
1	Scale (Gram)	A-A-52021-1 NIIN 00-514-4117 or equivalent
1	Die, Cylinder Thread Chaser	3/8 inch, Size 24

Materials Required

Quantity	Description	Reference Number
1	Seat Seal	849AM NIIN 01-290-8171

NOTE

Weight of charged cylinder will vary according to manufacturer.

1. Weigh a charged cylinder and compare the minimum stamped weight with the scale weight. Discard and replace cylinder if scale weight is 2 grams less than minimum stamped weight.

2. The LPU-32/P Life Preserver assembly uses two 840AM Inflators, and two MIL-C-601G, Type III 16 gram CO_2 cylinders

3. Ensure that inflator lever is in a cocked position.

4. To assure a firm cylinder seat, conduct a cylinder thread count. Threaded portion of cylinder neck shall contain a minimum of seven full threads to assure a firm cylinder seat within valve body. Any cylinder found with less than seven full threads shall be discarded. See figure 25-4.

CAUTION

Steel threads on CO_2 cylinder can cause damage to aluminum threads on inflator if cylinder is not carefully threaded.

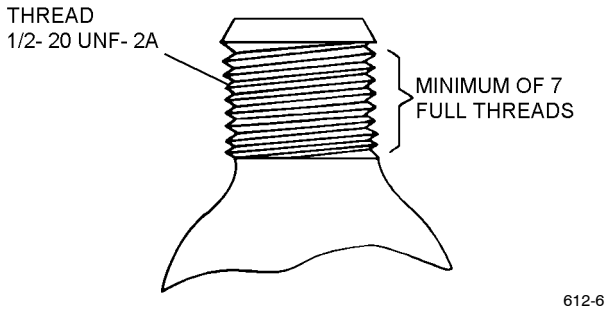
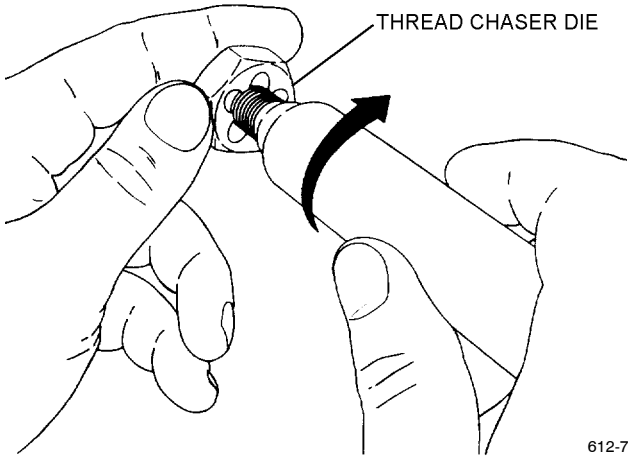


Figure 25-4. Cylinder Thread Count

5. If binding occurs during installation of cylinder, use thread chaser die on cylinder thread to cut free excessive plating. Reinstall cylinder. If binding still occurs, replace cylinder.



Step 5 - Para 25-46

6. After performing functional test, insert a new seat seal gasket. At intermediate inspection intervals, inspect condition of gasket and replace if necessary.

7. Install CO_2 cylinder into inflator body as far as hand twisting will permit.

8. Close inflation valve protective covers if installed. Secure with hook and pile tape provided.

25-47. REPAIR/REPLACEMENT.

25-48. This section contains instructions for the repair or fabrication of various components or subassemblies of life preservers to ensure that appropriate items of equipment remain in Ready For Issue (RFI) status. Reference numbers for parts which are defective, corroded or worn and require replacement are included in the applicable section. Other replacement parts, such as carrying cases and personal survival equipment, are listed in the applicable table.

25-49. Replacement of easily removed assembly components such as CO_2 inflation valves and survival items are authorized in addition to repair and replacement procedures documented in this section. The life preserver shall be subjected to a functional and leakage test each time CO_2 inflation valves are removed and replaced for any reason, and each time inflation valve gaskets are replaced.

25-50. DETERMINATION OF REPAIRABILITY. Patching of holes, cuts, tears or punctures 1 inch square or less are the only repairs authorized in a life preserver bladder.

25-51. Life preserver shall be considered beyond repair for any of the following reasons:

1. Porous fabric areas on flotation bladder.

2. Split or open bladder seams with the exception of non-leaking bladder fin seams.

3. Leakage test failure resulting from other than repairable cut, tear or puncture.

4. Holes, cuts, tears or punctures within 1 inch of flotation bladder seams.

5. Deterioration of the coated fabric caused by oil, grease, or any other foreign substance.

6. Deterioration of the coated fabric caused by a heavy mildewed condition.

25-52. CASING REPAIR PROCEDURES. To repair casings, proceed as follows:

Materials Required

Quantity	Description	Reference Number
As Required	Thread, Nylon, High Temperature Resistant, Sage Green	MIL-T-83193 NIIN 00-405-2252
	-or-	
As Required	Thread, Nylon, Type II, Size E, Sage Green	V-T-295 NIIN 00-204-3884
As Required	Cloth, Aramid, Non-melting, Type 456, Class I, Sage Green	MIL-C-83429 NIIN 01-147-2064
As Required	Tape, Hook, Type II, Sage Green	MIL-F-21840 NIIN 00-405-2266
As Required	Tape, Pile, Type II, Sage Green	MIL-F-21840 NIIN 00-405-2263

1. Minor holes, rips, tears, or abrasions in casing assembly may be repaired if they do not exceed 2 inches.

2. Repair or replace loose or damaged hook and pile tape as required.

3. Remove bladder in areas being repaired.

4. For all repairs plus loose or broken stitching use 6 to 8 stitches per inch and back stitch one half inch.

5. Casing assembly worn beyond economical repair shall be discarded.

25-53. CASING GROMMET REPLACEMENT. To replace casing grommet, proceed as follows:

Support Equipment Required

Quantity	Description	Reference Number
1	Punch, Cutting, 3/16	3GGG-P-833 NIIN 00-180-0941
1	Pencil, Solder	W-S-570 NIIN 00-204-3855
As Required	Tape, Nylon, Sage Green, 1 inch	MIL-T-5038 NIIN 00-753-6144
2	Grommet, Brass, Size 00	MS20210-GB-20 NIIN 00-291-0302

1. Separate bladder and casing in areas being repaired.

2. Remove loose grommet.

3. Reinforce worn grommet hole in casing by using nylon tape.

a. Prepare reinforcing material.

(1) Cut and sear edges of a 1 inch length of nylon tape.

b. Sew reinforcing material over grommet location, centered where possible. Use a cross box stitch with 6 to 8 stitches per inch, 1/6 inch from edge.

4. Install new grommet.

a. Locate original grommet hole. Cut hole in reinforcing material using 3/16 cutting punch.

b. For nylon tape, carefully sear hole to prevent fraying using solder pencil.

c. Install grommet using 00 grommet setter and base.

25-54. CEMENTING LIFE PRESERVERS. Cementing of life preservers shall be performed as follows:

Support Equipment Required

Quantity	Description	Reference Number
1	Roller, Wooden	GGG-R-00620 NIIN 00-243-9401
1	Brush, Disposable	NIIN 00-514-2417

Materials Required

Quantity	Description	Reference Number
As Required	Toluene	TT-T-548 NIIN 00-281-2002
	-or-	
As Required	Methyl Ethyl Ketone (MEK)	TT-M-261 NIIN 00-281-2762
As Required	Adhesive, Polyurethane (Note 1)	MIL-A-47315 P/N UR-1092 NIIN 01-375-7855
As Required	Talc, Technical	MIL-T-50036A NIIN 01-089-9589

Notes: 1. Polyurethane adhesive (UR-1092) may be open purchased from the following source (minimum order $150.00):
Clifton Adhesives Inc.
Burgess Place
Wayne, NJ 07473
201-694-0845

WARNING

Do not use toluene or MEK near open flame, heat or electrical sparks. Avoid prolonged contact with skin or breathing of fumes. Use only in a well ventilated area.

CAUTION

Use only polyurethane adhesives on heat sealed polyurethane-coated cloth of LPU-32/P life preserver assemblies.

NOTE

Toluene shall be the primary solvent used in the fabrication or repair of this assembly. MEK may be used if Toluene is not available. Always use solvents sparingly and wipe up excess solvents; do not allow to dry by evaporation.

Toluene or MEK must be applied vigorously to life preserver material over three years old in order to reactivate the material prior to cementing. Pigment from the material coloring staining a cloth rubbed over the treated surface will indicate the material has been reactivated. Cement shall be applied immediately after the surface has dried.

1. Clean both surfaces to be cemented with four applications of toluene or MEK. Apply toluene or MEK with back-and-forth strokes on the first and third applications, and one-way strokes on the second and fourth applications. Allow area to dry between applications.

CAUTION

The effective active period of adhesive mixtures composed of polyurethane and an accelerator is eight (8) hours. Do not use mixture if older than eight hours.

2. Prepare only enough mixture for 8 hours. Dispose of any remaining mixture.

3. Using a disposable brush, apply cement to completely cover surfaces to be cemented. Use long, one direction strokes and complete each surface before cement becomes tacky as the brush may pull tacky cement from the surface. Allow to dry for 10 minutes.

4. Apply a second coat of cement as in step 3. Use brush strokes perpendicular to the original direction.

5. When second coat of cement has become tacky, place pieces together. If cemented area has a cut or tear, butt edges of damage before applying patch. Roll out bubbles with a wooden roller.

6. Allow cement to cure a minimum of 48 hours.

7. Dust area with talc (MIL-T-50036A).

25-55. PATCHING LIFE PRESERVERS. Patching of life preservers shall be performed as follows:

NOTE

Life preserver is not repairable if it has holes, cuts, tears, or punctures over one-inch square.

Materials Required

Quantity	Description	Reference Number
As Required	Cloth, Nylon, Polyurethane-coated, Type I	MIL-C-83489 NIIN 01-335-3129

CAUTION

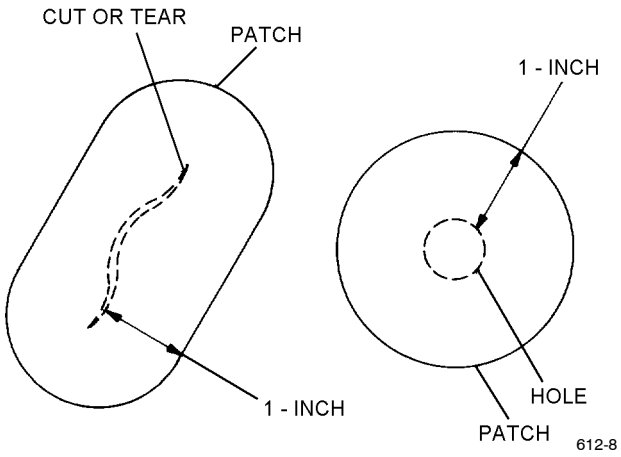
Only Polyurethane adhesives and Polyurethane-coated cloth and patches shall be used on Polyurethane-coated LPU-32/P life preserver assemblies.

NOTE

Select patch color as near as possible to color of life preserver being repaired.

Use of cloth from BCM raft/life preservers is authorized for repair, with two exceptions. Inflatables condemned for contamination (oil, grease, etc.) and ALSS equipment involved in mishaps shall not be used for repairs.

1. Cut a rounded patch 1 inch larger than damage on all sides.



Step 1 - Para 25-55

2. Center patch over damage and trace an outline of patch on fabric.

3. Cement patch to damaged area in accordance with paragraph 25-54.

4. Dust area with talc (MIL-T-50036A).

5. Perform a leakage test.

25-56. REPLACEMENT OF ORAL INFLATION VALVE. There is no authorized repair of the oral inflation valve.

25-57. RECEMENTING OF BLADDER FIN SEAMS. Recementing of seams is as follows:

CAUTION

Recementing of fin seams is not authorized for heat sealed LPU-32/P Life Preservers.

25-58. FASTENER REPLACEMENT. Replace fasteners as follows:

1. To replace hook and pile fastener tapes, proceed as follows:

Materials Required

Quantity	Description	Reference Number
As Required	Fastener Tape, Hook, Type I, Class 1, Sage Green	MIL-F-21840
	1 inch Width	NIIN 00-405-2266
	1 1/2 inch Width	NIIN 00-425-1294
As Required	Fastener Tape, Pile, Class 1, Sage Green	MIL-F-21840
	1 inch Width	NIIN 00-405-2263
	1 1/2-inch Width	NIIN 00-405-2264
As Required	Thread, Nylon, High Temperature Resistant, Sage Green	MIL-T-83193 NIIN 00-405-2252
	-or-	
	Thread, Nylon, Type II, Size E, Sage Green	V-T-295 NIIN 00-204-3884
1	Fastener, Slide, Interlocking, Sage Green	V-F-106, TY III

a. Carefully remove damaged fastener tape by removing attachment stitching.

b. Cut new fastener tape the same length and width as the original fastener tape. Sear ends of tape.

c. Place fastener tape on garment in position of original fastener tape. Stitch to garment using a single row of stitching, 1/8 inch from fastener tape edge on all four sides.

2. To replace slide fasteners, proceed as follows:

a. Remove casing from bladder assembly.

b. If correct length slide fastener is not available, construct a slide fastener the same length as the original slide fastener. Replace the entire slide fastener.

NOTE

All stitching is to be performed with a type 301 stitch, 8-10 stitches per inch. Backstitch 1/2 inch at ends of all stitching.

c. Remove all stitching attaching slide fastener to casing. Do not cut casing or attachment grommet flap material.

NOTE

Observe orientation of both attachment grommet flaps as they are removed. Ensure that both attachment grommet flaps are resewn in the same orientation with the slide fastener.

d. Stitch new slide fastener and attachment grommet flap in place, stitching along previous stitching outline.

e. Finish stitching, replacing all stitches removed.

f. If survival items pouch slide fastener is being replaced, invert pouch to remove stitches and slide fastener from inside. Replace slide fastener with a complete new slide fastener equipped with 2 sliders and pulls.

25-59. DISASSEMBLY OF THE LPU-32/P LIFE PRESERVER. To disassemble the LPU-32/P life preserver, proceed as follows:

Materials Required

Quantity	Description	Reference Number
1	Side cutters or scissors	—

NOTE

Life preserver shall be disassembled only to the extent necessary to perform required maintenance or inspection.

The flotation assembly is attached inside the casing on both the left and right sides of the zipper. Both sides must be detached in order to fully separate the flotation assembly and casing.

1. Lay life preserver flat on a worktable, either side up. Unzip life preserver. Open hook-and-pile

seam on casing and spread flotation assembly flat on worktable. Turn life preserver over as needed to aid in disassembly.

2. Remove CO_2 cylinders from both inflators and retain them for reassembly.

3. Unsnap both beaded inflation handles from casing (inflators and beaded inflation handles are still attached to flotation assembly).

4. Untie or cut tacking thread from knots on nylon cord reeved through attachment grommets.

5. Untie or cut the nylon cord and unlace from attachment grommets.

6. Dispose of nylon cord.

7. Remove flotation assembly from casing.

25-60. REASSEMBLY OF THE LPU-32/P LIFE PRESERVER. To reassemble the LPU-32/P life preserver, proceed as follows:

Materials Required

Quantity	Description	Reference Number
As Required	Cord, Nylon, Type III	MIL-C-5040 NIIN 00-240-2146

NOTE

The flotation assembly is attached inside the casing on both the left and right sides of the zipper. Both sides must be reattached in order to fully reassemble the flotation assembly and casing.

Reattach one side of the preserver in accordance with the following steps, then reattach the other side.

1. Lay life preserver casing flat on worktable, either side up. Unzip life preserver. Open hook-and-pile seam on casing and fold upper side of casing over the zipper to expose the interior.

2. Spread flotation assembly flat on casing. Flotation assembly attachment grommets shall lay flat on casing attachment grommets. Align flotation attachment grommets with casing attachment grommets. Pull casing up through center of flotation assembly as necessary.

3. Measure, cut and sear the ends of a 12-inch length of Type III Nylon Cord. Tie an overhand knot 3/4 inch from one of the ends. Starting at the top hole of the grommets aligned in step 1, pass the end of cord without the knot down through the aligned grommets. Continue reeving cord from top to bottom. When complete, the free end of cord without the knot should be exiting the bottom grommets. Tie an overhand knot as close to the grommets as possible. Repeat step for opposite side grommets.

4. If not previously performed, perform leakage test in accordance with paragraph 25-41.

5. Refer to paragraph 25-66 to repack the LPU-32/P Life Preserver.

25-61. REPLACEMENT OF BEADED INFLATION HANDLE ASSEMBLY. Replace the entire beaded inflation handle assembly as a unit. To replace the beaded inflation handle, proceed as follows:

Materials Required

Quantity	Description	Reference Number
As Required	Handle, Beaded, Inflation	(CAGE 30003) NIIN 01-120-4752
As Required	Thread, Nylon, Size E	V-T-295 NIIN 00-204-3884

1. Cut and remove safety tie securing beaded inflation handle.

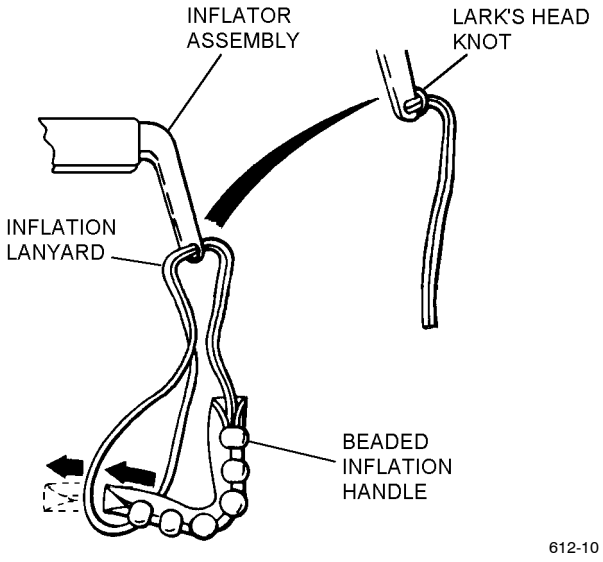
Figure 25-5. Deleted

2. Open and unfold life preserver assembly.

3. Remove CO_2 cylinder from CO_2 inflator assembly. Retain CO_2 cylinder for reinstallation.

4. Unsnap beaded inflation handle from life preserver casing: then remove inflation lanyard from inflator lever.

5. Secure new beaded handle inflation lanyard to actuating lever by passing lanyard through hole in end of actuating lever. Pass beaded inflation handle through loop in lanyard to form lark's head knot.



Step 5 - Para 25-61

6. Perform beaded inflation handle pull test. Refer to paragraph 25-38.

7. Fasten beaded inflation handle to casing with snap fasteners provided; then safety-tie beaded inflation handle with one turn of size E nylon thread, single. Draw thread sufficiently to permit 1/2 inch ±1/8 inch space between the middle beads and webbing on the preserver. Tie ends of both safety ties with a surgeon's knot followed by a square knot.

8. Recock CO_2 inflator and install CO_2 cylinder.

9. Pack life preserver according to procedures outlined in paragraph 25-66.

10. Make necessary entries on appropriate form in accordance with OPNAVINST 4790.2 Series.

25-62. REPAIR OF CORRODED CO_2 INFLATION VALVE. To repair CO_2 inflation valve, proceed as follows:

Materials Required

Quantity	Description	Reference Number
As Required	Lubricant, Silicone	DC7 (CAGE 71984) NIIN 00-975-0712
1	Valve Stem Kit (Note 1)	105AS100-6 (CAGE 30003) NIIN 00-113-8290
1	Seat Seal	849AM NIIN 01-290-8171
As Required	Cloth, Emery No. 240	—
1	Inflator	840AM NIIN 01-356-8233
As Required	Abrasive Mat	MIL-A-9962 NIIN 00-967-5093
As Required	Corrosion Preventive Compound (Amiguard) Type I	MIL-C-85054 NIIN 01-041-1596

Notes: 1. Valve Stem Kit, P/N 105AS100-6, NIIN 00-113-8290, contains one top and one bottom gasket.

1. Remove CO_2 cylinder from valve. Remove inflation valve from preserver. Discard two gaskets on valve stem.

2. Remove grooved taper pin (retaining lever) from inflation valve, using awl and mallet. See figure 25-6.

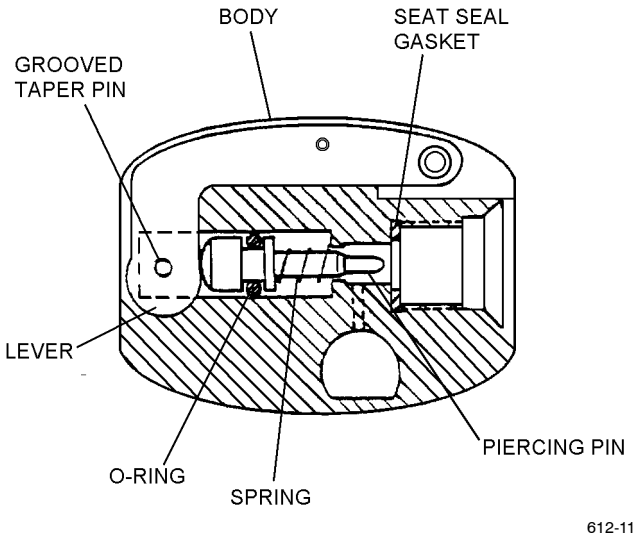


Figure 25-6. Typical CO_2 Inflation Assembly

3. Remove lever, spring, and piercing pin.

4. If spring is broken or corroded, replace entire valve.

5. If piercing pin or actuating lever is corroded, remove corrosion with abrasive mat. If abrasive mat is ineffective, use 240 grit emery cloth. Do not damage O-ring on piercing pin. Wipe off any dirt or moisture from actuating lever and apply a thin coat of MIL-C-85054 and allow to dry.

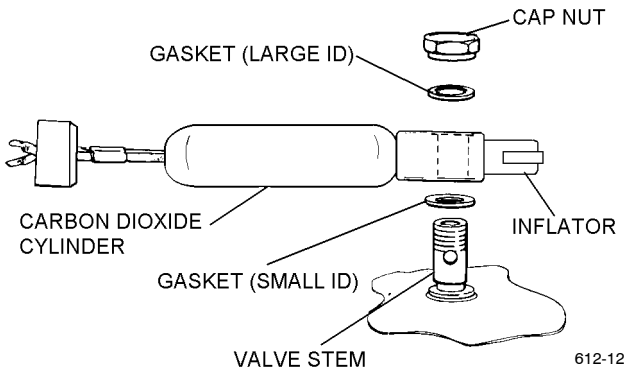
6. Clean residue from actuating lever on piercing pin. Lightly coat base of piercing pin with silicone lubricant.

7. Reassemble inflation valve and operate actuating lever three or four times. Ensure that lever and piercing pin move freely.

8. If piercing pin and lever do not move freely, obtain replacement valve.

9. Reinstall inflation valve on life preserver using new gaskets. Install new seat seal gasket. Reinstall CO_2 cylinder.

10. Install cap nut onto valve stem and torque to a value of 8 ±1 in-lb.



Step 10 - Para 25-62

25-63. REPLACEMENT OF TOP AND BOTTOM GASKETS. To replace the top and bottom gaskets on the inflators, proceed as follows:

Support Equipment Required

Quantity	Description	Reference Number
1	Wrench, 9/16 inch	—

Materials Required

Quantity	Description	Reference Number
1	Valve Stem Kit (Note 1)	105AS100-6 (CAGE 30003) NIIN 00-113-8290

Notes: 1. Valve Stem Kit, P/N 105AS100-6, NIIN 00-113-8290, contains one top and one bottom gasket.

1. Remove cap nut and top gasket from inflator.

2. Remove inflator and replace bottom gasket.

3. Carefully place inflator onto valve stem.

4. Install top gasket onto valve stem.

5. Tighten cap nut onto valve stem and torque to a value of 8 ±1 in-lb.

6. Perform functional and leakage tests on life preserver cell that was repaired. Refer to paragraphs 25-30 and 25-39.

25-64. REPLACEMENT OF CHECK VALVE ASSEMBLY. To replace a defective check valve assembly, proceed as follows:

Support Equipment Required

Quantity	Description	Reference Number
1	Tool, Valve Core	8769A or equivalent (CAGE 27783) NIIN 01-354-5423
1	Wrench, Torque	—

Materials Required

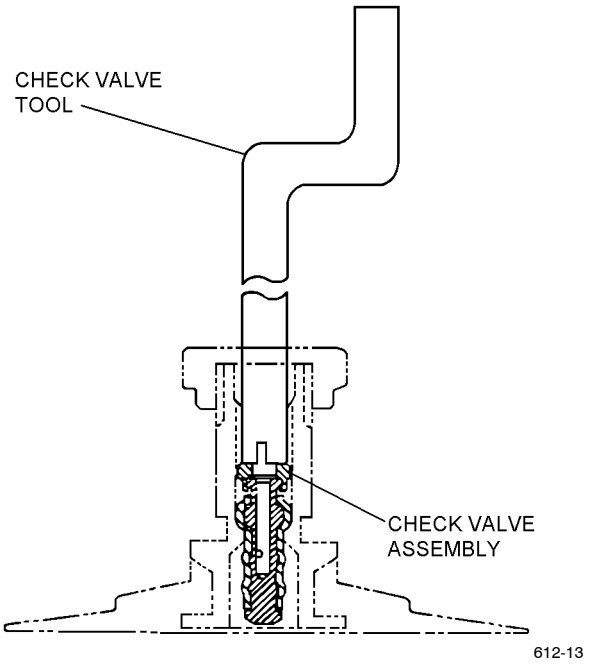
Quantity	Description	Reference Number
1	Valve, Pneumatic Inflator (Check Valve Assembly) (Note 1)	Schrader-Bridgeport P/N 8457500047

Notes: 1. Schrader-Bridgeport P/N 8457500047 must be open purchased from:
Schrader-Bridgeport Intl
205 Frazier Rd
P.O. Box 668
Altivista, VA 24517
Phone (804) 369-8875

1. If not available, fabricate a valve core tool as shown in Chapter 3.

2. Remove inflator cap nut.

3. Insert valve core tool and unscrew check valve from valve stem.



Step 3 - Para 25-64

4. Insert new check valve in valve stem and tighten with valve core tool hand tight.

5. Replace cap nut and torque to a value of 8 ±1 in-lb.

6. Perform a functional and leakage test on life preserver cell that was repaired. Refer to paragraphs 25-30 and 25-39.

25-65. FABRICATION OF PROTECTIVE COVER ASSEMBLY. To fabricate a protective cover for the inflator and CO_2 cylinder, proceed as follows:

Support Equipment Required

Quantity	Description	Reference Number
17 x 6 inches	Cloth, Nylon, Polyurethane-coated, Type I	MIL-C-83489 NIIN 01-335-3129
4 x 5/8 inches	Fastener, Tape, Hook, Type II	MIL-F-21840
4 x 5/8 inches	Fastener, Tape, Pile, Type II	MIL-F-21840
As Required	Thread, Nylon, Type I or II, Size E	V-T-295 NIIN 00-204-3885

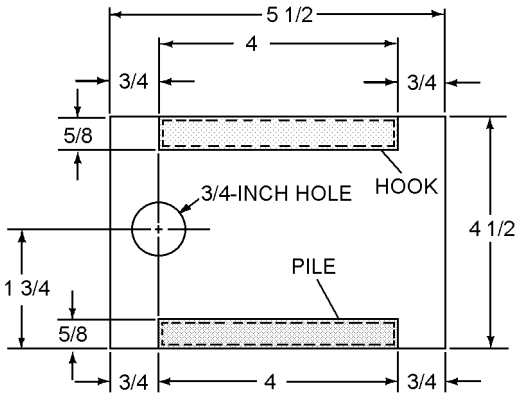
NOTE

Use same dimensions and procedures for both protective covers.

1. To fabricate protective cover, proceed as follows:

a. Cut a 5 x 4 1/2-inch length of coated nylon cloth.

b. Cut a 4 inch length of hook and pile tape and sew to the coated side of the cloth. Use stitch type 301 stitching 8 to 10 stitches per inch.

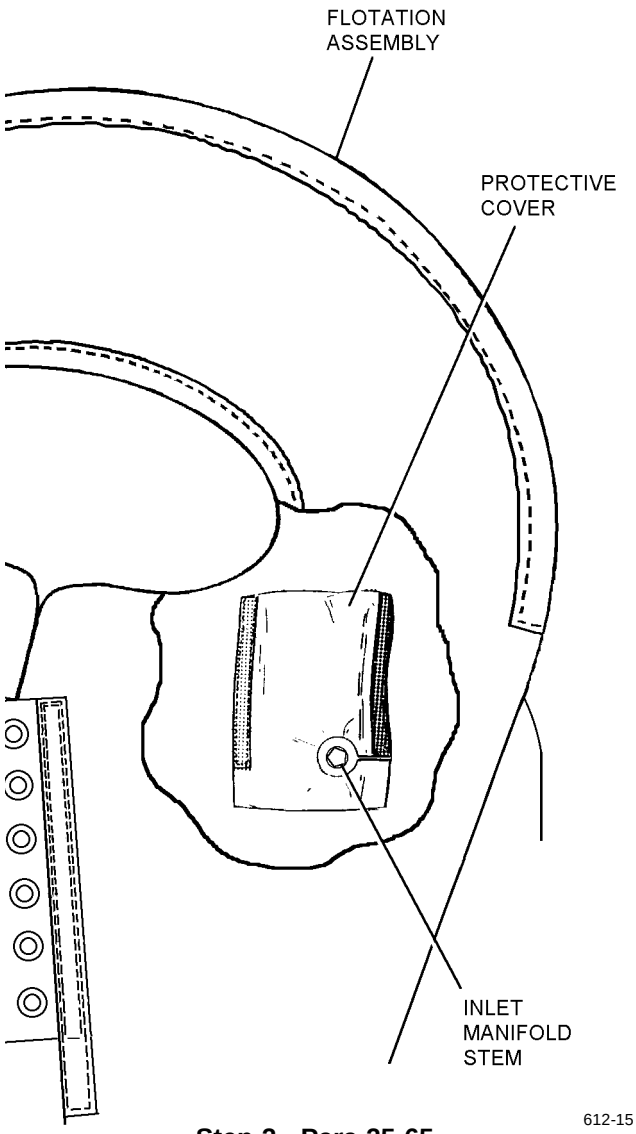


612-14

Step 1b - Para 25-65

c. Position coated cloth, coated side up, over cutting board and punch a 3/4-inch diameter hole.

2. Install protective cover before installing inflator and CO_2 cylinder.



612-15

Step 2 - Para 25-65

25-65A. FABRICATION OF EXTENSION BELT ASSEMBLY. To fabricate an extension belt, proceed as follows:

Materials Required

Quantity	Description	Reference Number
As Required	Thread, Nylon Type I or II Size E	V-T-295 NIIN 00-204-3885
1	Side Release Buckle 2-Inch	P/N 101-1200-5614 (Note 1)

Materials Required (Cont)

Quantity	Description	Reference Number
18 inches	Webbing, Nylon Type VIII	MIL-W-4088 NIIN 00-261-8585

Notes: 1. Buckle is open purchase from:
ITW Waterbury
952 South Main St.
Waterbury, Connecticut 06721
Phone (203) 753-1161
(CAGE 82399)
Minimum purchase is box, 250 buckles per box.

1. Ensure both ends of 18-inch length of Type VIII webbing have been seared. Measure and mark a line 3 inches in from each end of webbing.

2. With buckle coupled, turn side with identification markings up. Reeve one end of webbing up through first (single) bar on either side of buckle until 3-inch mark is aligned with bar. Using stitch type 301, stitching 8 to 10 stitches per inch, sew a 1 1/4 x 1 1/2-inch crossbox stitch 3/8 inch in from seared end. Repeat for opposite side of buckle, ensuring no twists are in the webbing.

3. Twist webbing and buckle until identification markings are facing inboard. Extension belt is ready for use.

25-66. PACKING LPU-32/P LIFE PRESERVER ASSEMBLY.

25-67. The LPU-32/P Life Preserver Assembly shall be packed by qualified personnel at the lowest level of maintenance possible. For cleaning and servicing, refer to paragraph 25-43.

NOTE

The 28th In-Service Management Panel Meeting for Aviation Life Support Systems rescinded the requirement for the Packer to sign the History Patch on Life Preservers, via Action Chit 97-025. The requirement for all other records documentation remains unchanged. The reason for this change is most history patches are unreadable, and the Packer and Inspectors names are documented on History Cards.

25-68. To pack a LPU-32/P Life Preserver Assembly, proceed as follows.

1. Ensure that flotation collar, pouch, belt, and casing have been inspected in accordance with paragraph 25-19.

NOTE

NAVAIR 13-1-6.5 contains information on inspection and replacement of survival items.

2. Ensure that survival items have been inspected for expiration and damage. See table 25-1 for items used.

3. Lay life preserver assembly on a clean surface. Close slide fastener. Connect buckle. Either side of life preserver is folded first, followed by folding the remaining side.

NOTE

The dye marker, whistle, and chemical light shall be tied to the grommets in the pouch. Each shall be secured with a 48 ± 2-inch length of Type I nylon cord (MIL-C-5040) using bowline knots only.

4. Ensure that each survival item is properly attached.

5. Accordion fold excess stowage line and secure with a rubber band to avoid entanglement with survival items.

6. Place dye marker in bottom of pouch.

7. Position chemical light and whistle on top of dye marker.

8. Ensure that each survival item is properly stowed.

9. Zip the survival pouch closed.

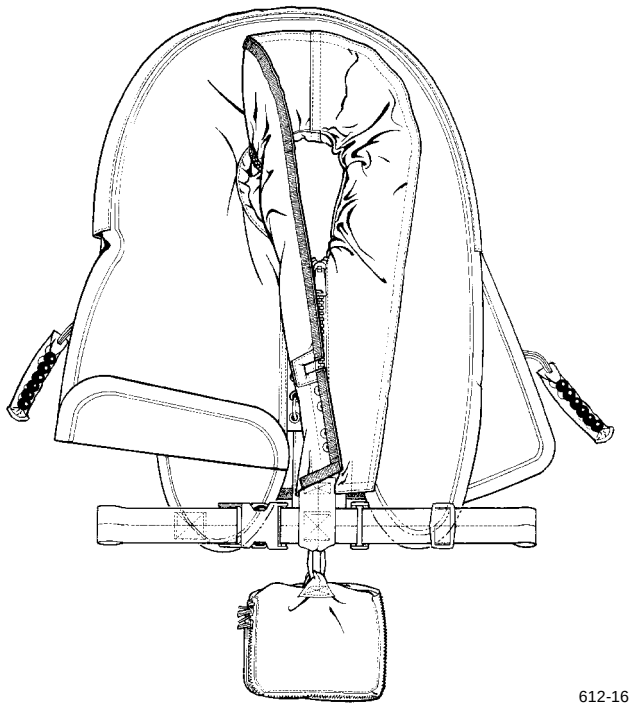
10. Ensure that life preserver flotation chambers are completely deflated. Dust all surfaces front and rear with talc (MIL-T-50036A).

11. Lay out life preserver with survival item pouch to the right and buckle facing up. Spread out casing and flotation collar.

12. Ensure CO_2 cylinders are installed as per paragraph 25-46. Set screws are not applicable for the LPU-32/P.

13. Stow both oral inflation valves between bladders.

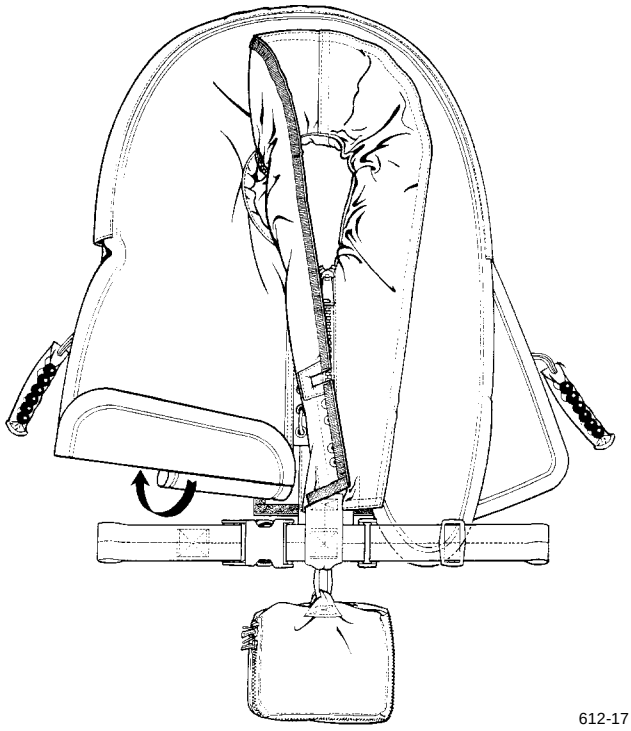
14. Fold end of top flotation chamber over approximately 1 inch from end of casing bottom.



612-16

Step 14 - Para 25-68

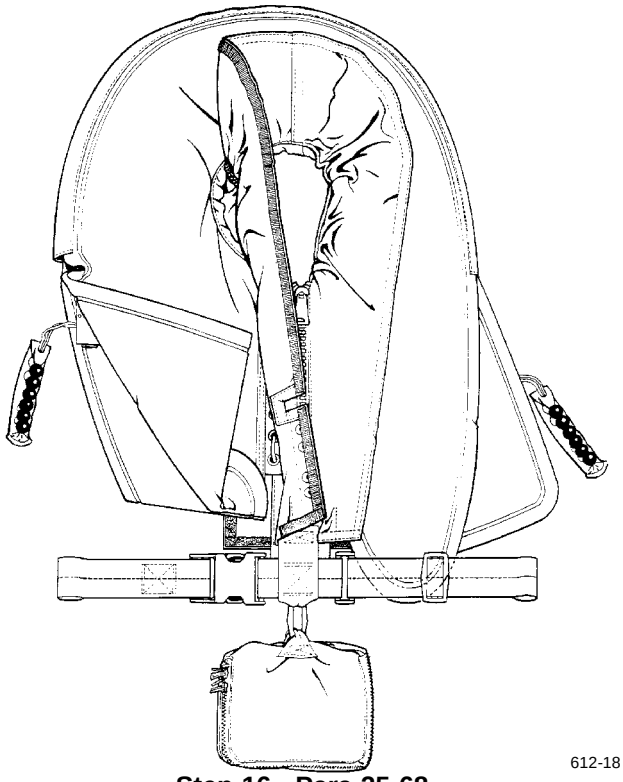
15. Fold bottom flotation chamber under approximately 1 inch from end of casing bottom.



612-17

Step 15 - Para 25-68

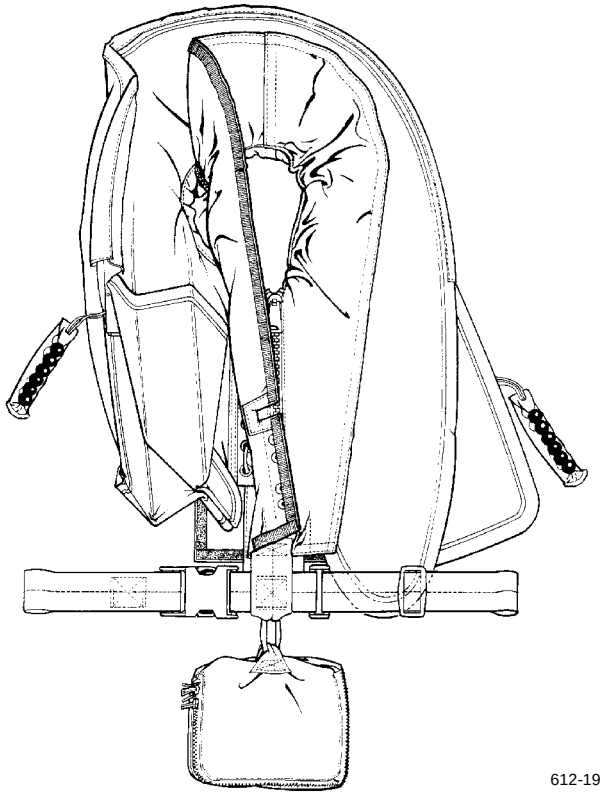
16. Fold top flotation chamber over at approximately a 30 degree angle.



612-18

Step 16 - Para 25-68

17. Fold flotation chambers lengthwise in an S-fold.

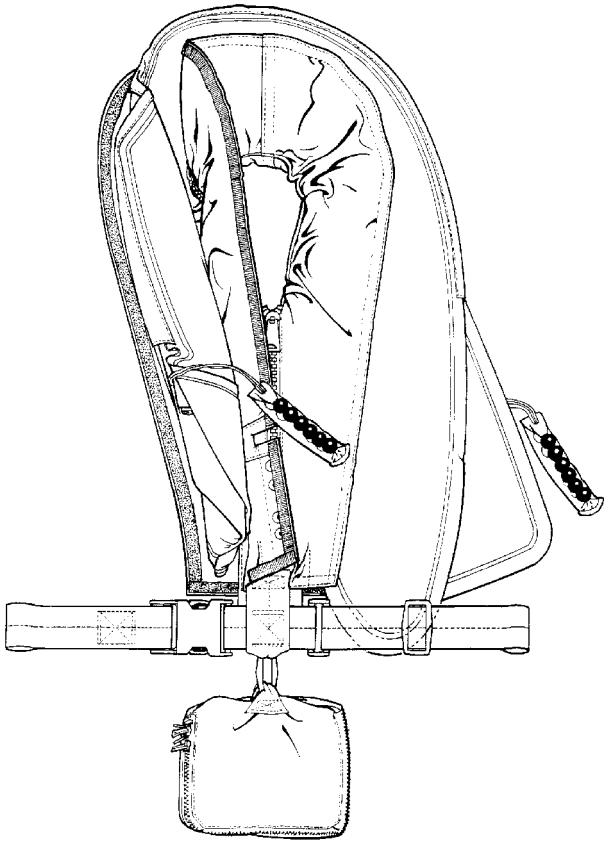


612-19

Step 17 - Para 25-68

18. Adjust fold of material to ensure that inflator bottle is positioned inboard of oral inflator valve.

19. Ensure that beaded handle exits from folded chambers.

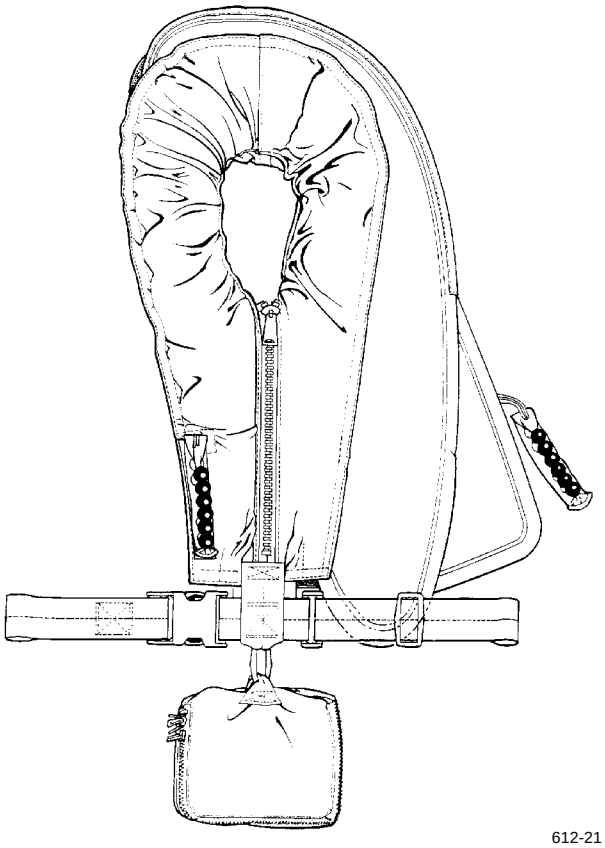


612-20

Step 19 - Para 25-68

20. Secure lower corner of stowage casing by attaching hook-and-pile tape.

21. Attach beaded handle to lower edge of casing by connecting four snap fasteners.



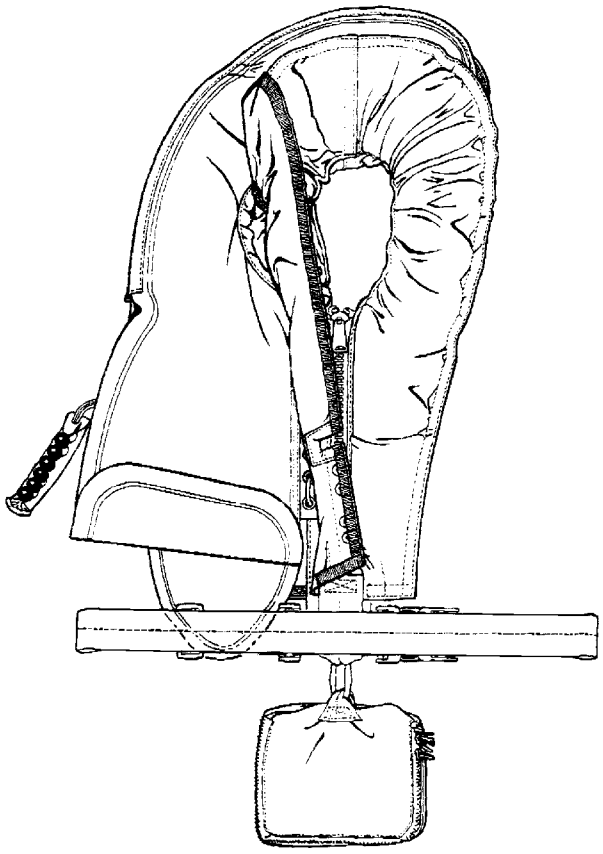
612-21

Step 21 - Para 25-68

22. Secure side of casing by attaching hook-and-pile tape.

23. Flip life preserver over, and lay out with survival pouch to the right and buckle facing down. Spread out casing and flotation collar.

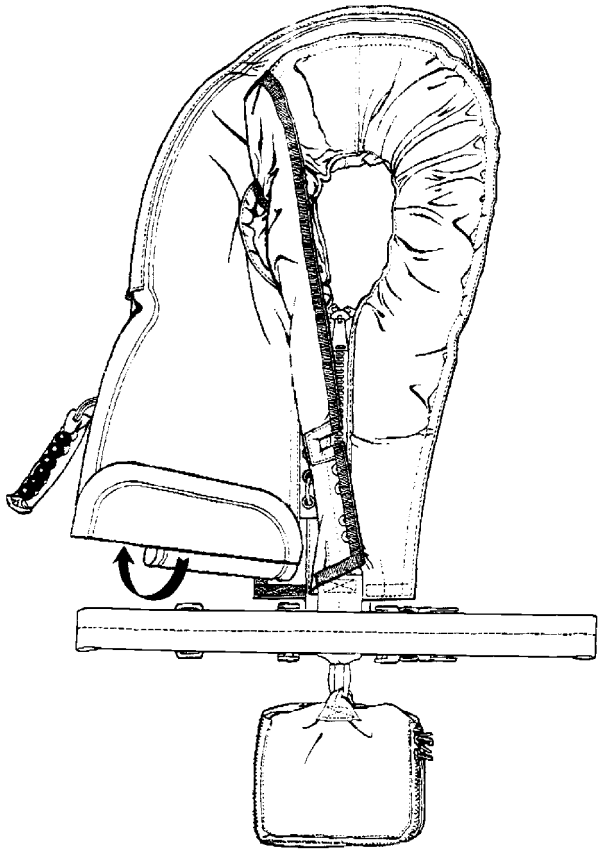
24. Fold end of top flotation chamber over and fold bottom flotation chamber over approximately 1 inch from end of casing bottom.



612-22

Step 24 - Para 25-68

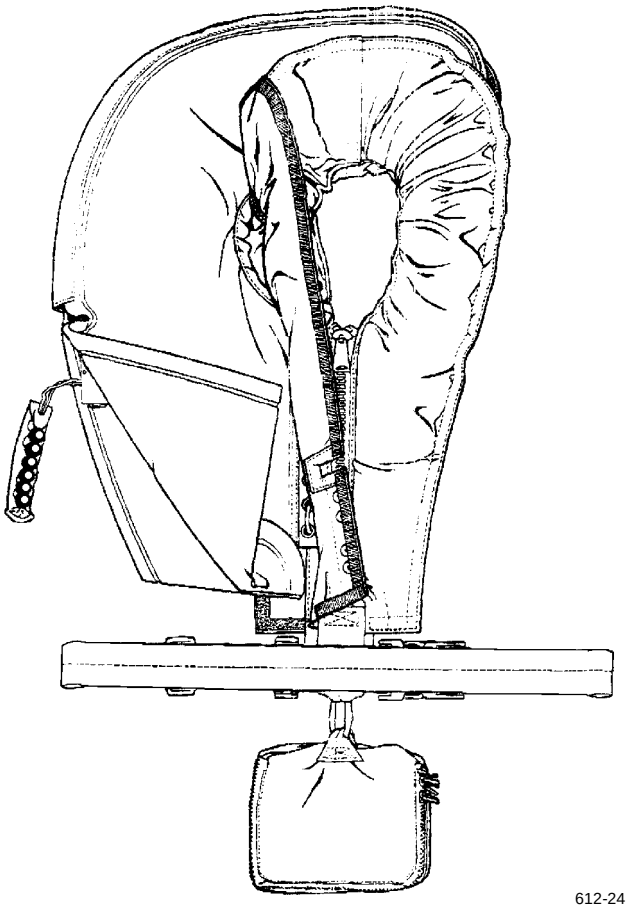
25. Fold bottom flotation chamber under approximately 1 inch from end of casing bottom.



612-23

Step 25 - Para 25-68

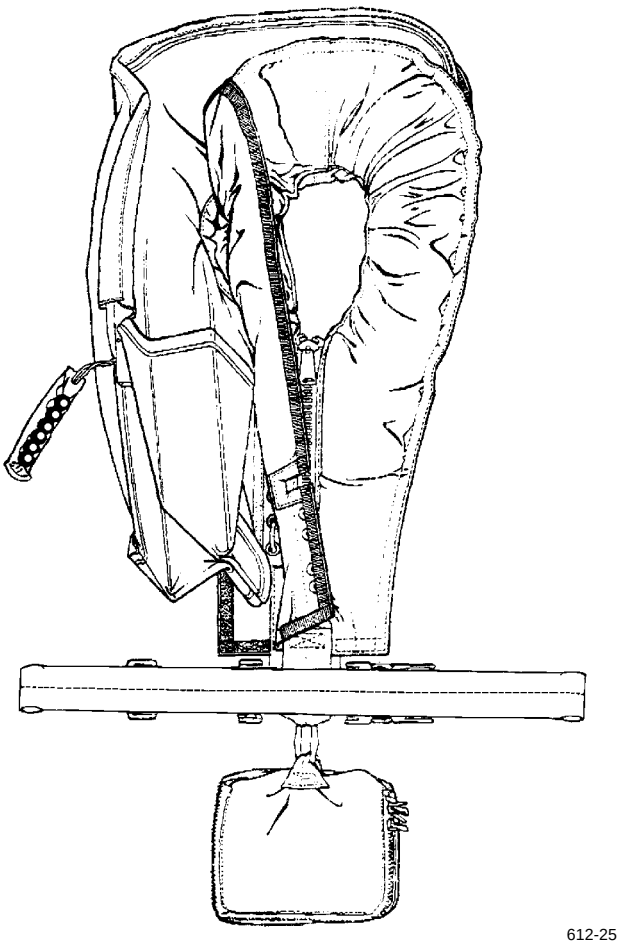
26. Fold top flotation chamber over at approximately a 30 degree angle.



612-24

Step 26 - Para 25-68

27. Fold flotation chambers lengthwise in an S-fold.

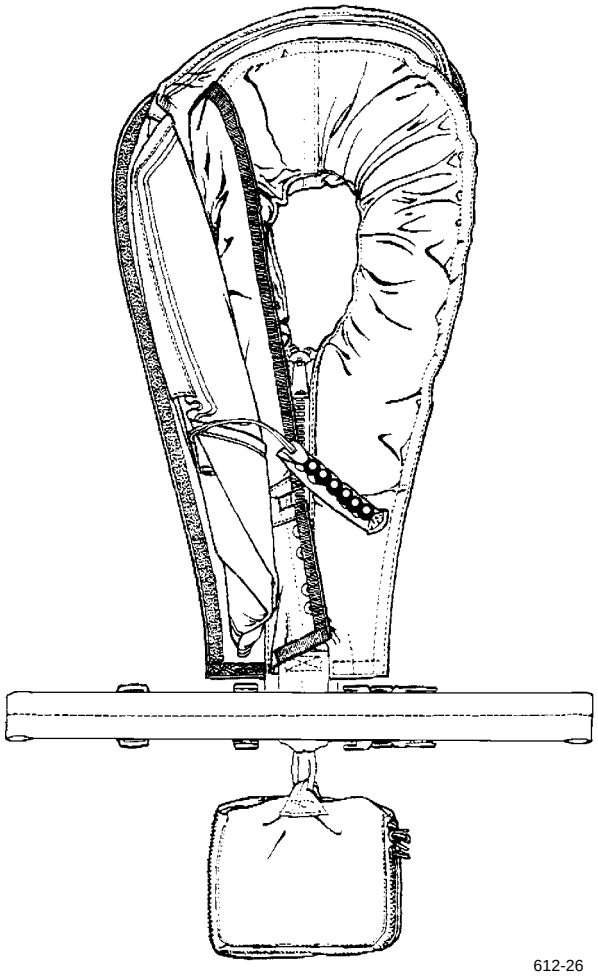


612-25

Step 27 - Para 25-68

28. Adjust fold of material to ensure that inflator bottle is positioned inboard of oral inflator valve.

29. Ensure that beaded handle exits from folded chambers.



Step 29 - Para 25-68

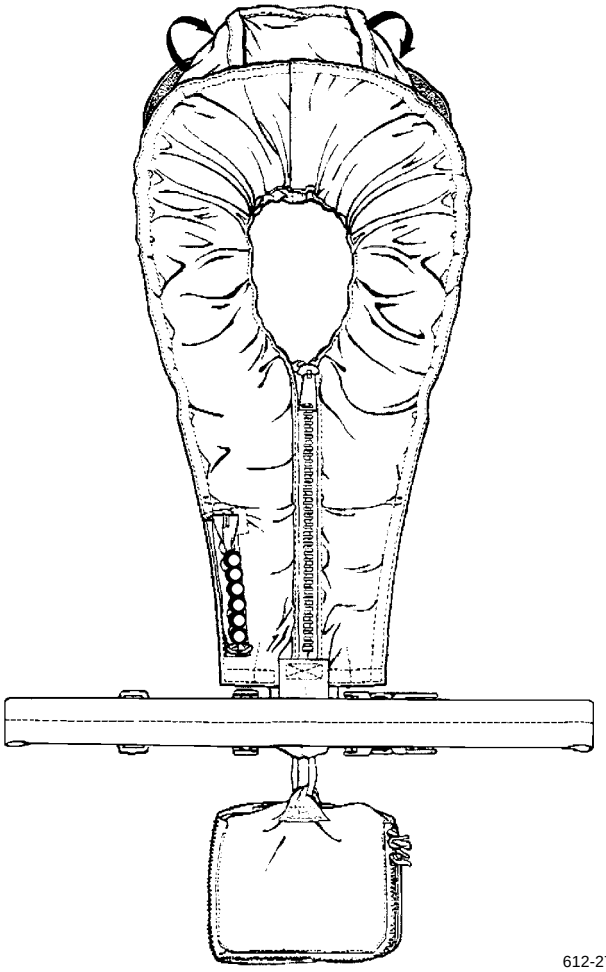
30. Secure lower corner of casing by attaching hook-and-pile tape.

31. Attach beaded handle to lower edge of casing by connecting four snap fasteners.

32. Secure side of casing by attaching hook-and-pile tape.

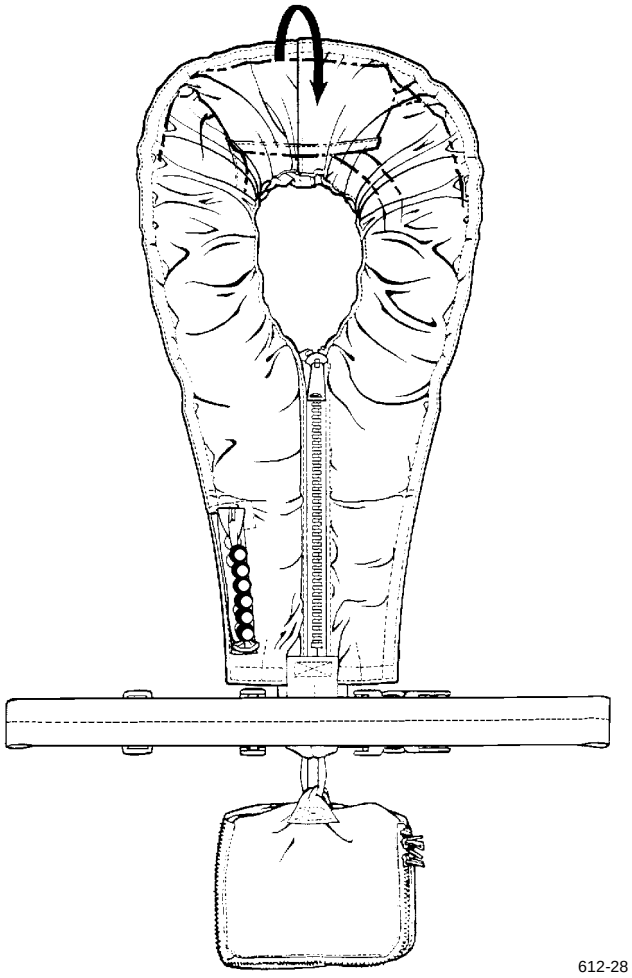
33. Rotate life preserver to stow neck portion of flotation collar.

34. Fold each side of flotation collar neck at approximately 45 degrees.



Step 34 - Para 25-68

35. Fold nape of collar in half and secure stowage casing by attaching hook-and-pile tape.



Step 35 - Para 25-68

36. Review hook-and-pile tape around perimeter of casing, adjusting as necessary for a secure attachment.

37. Safety-tie beaded inflation handle with one turn of size E nylon thread, single. Draw thread sufficiently to permit a 1/2 ±1/8 inch space between middle beads and webbing on preserver. Tie ends of both safety ties with a surgeon's knot followed by a square knot.

38. Make necessary entries on appropriate form in accordance with OPNAVINST 4790.2 Series.

Section 25-4. Illustrated Parts Breakdown (IPB)

25-69. GENERAL.

25-70. This section lists and illustrates the assemblies and detail parts of the LPU-32/P Life Preserver Assembly

25-71. The illustrated parts breakdown should be used for when requisitioning, storing, issuing, and identifying parts. It also illustrates disassembly and reassembly relationships.

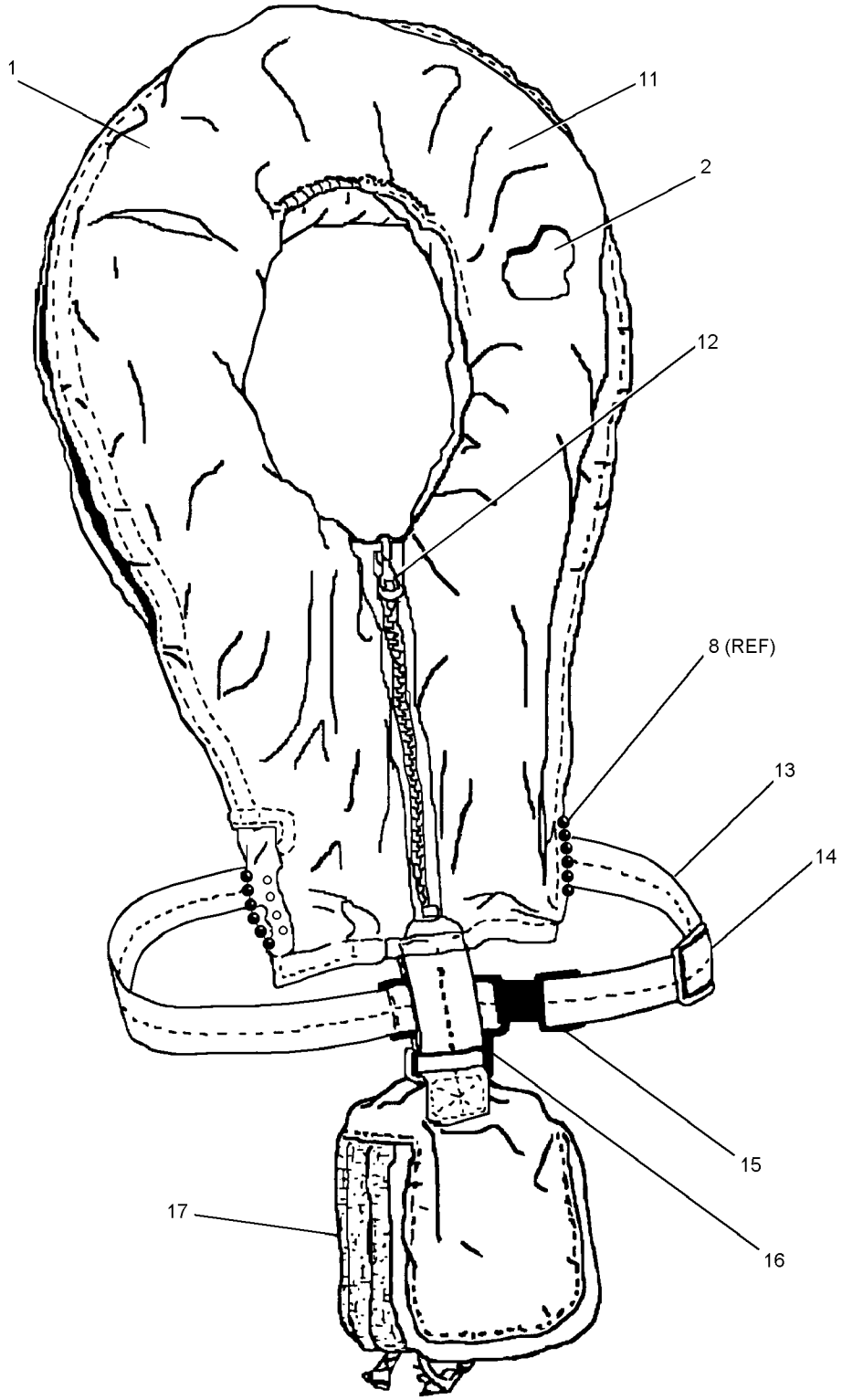
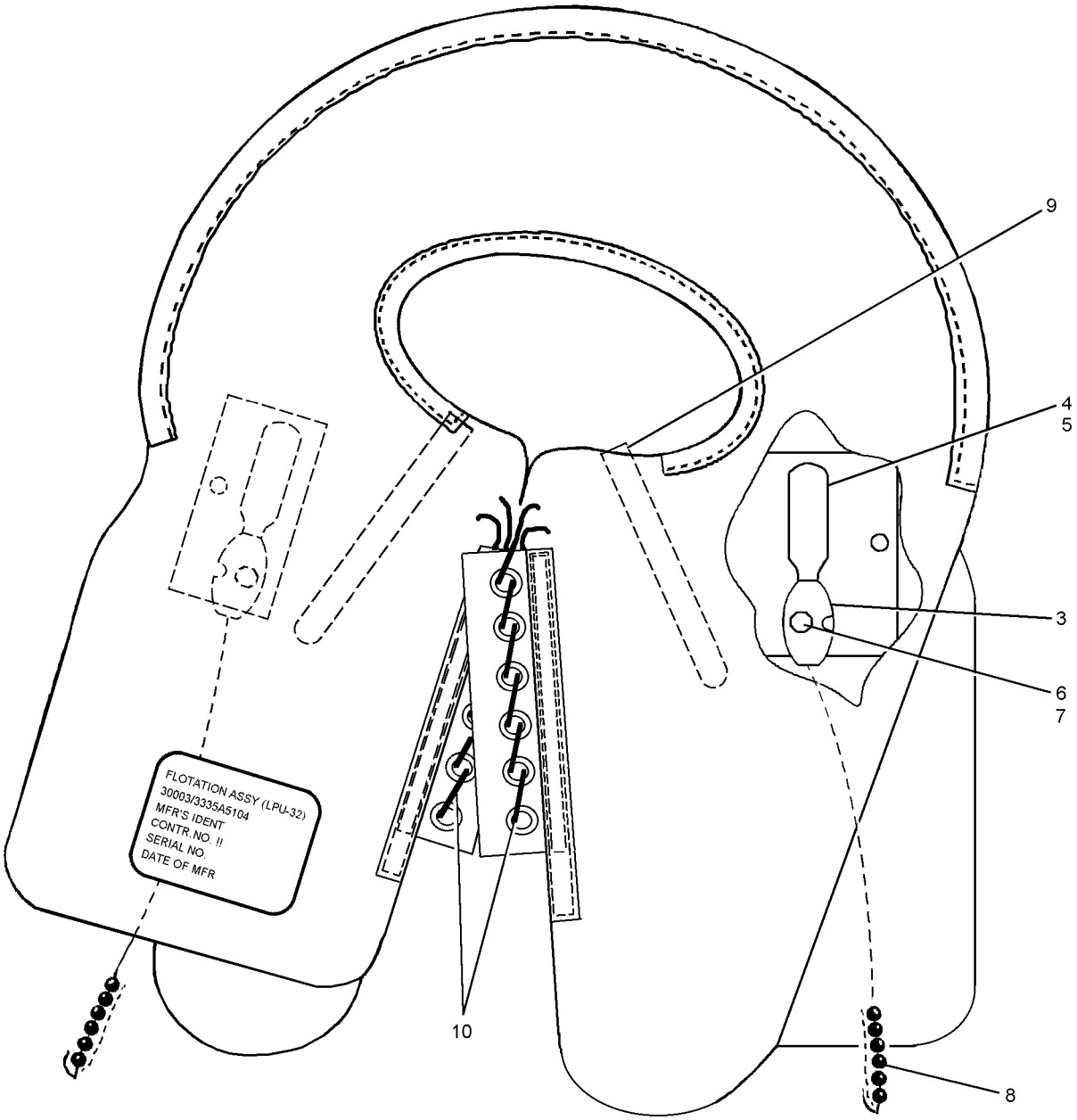


Figure 25-7. LPU-32/P Life Preserver (Sheet 1 of 2)



FLOTATION ASSEMBLY

612-29-2

Figure 25-7. LPU-32/P Life Preserver (Sheet 2 of 2)

Figure and Index Number	Part Number	Description 1 2 3 4 5 6 7	Units Per Assembly	Usable On Code
25-7	No Number	LPU-32/P LIFE PRESERVER ASSEMBLY	REF	
-1	3335AS101-1	. LIFE PRESERVER YOKE ASSEMBLY	1	
-2	3335AS104	. . FLOTATION ASSEMBLY	1	
-3	840AM	. . . INFLATOR	2	
-4	MIL-C-601 NIIN 00-458-9240	. . . CO_2 CYLINDER, 16g, Type III	2	
-5	849AM	. . . SEAT SEAL	2	
-6	768	. . . CHECK VALVE ASSEMBLY (Note 2) . . .	2	
-7	105AS100-6	. . . VALVE STEM KIT (Note 1)	2	
-8	975AS121-11 NIIN 01-120-4752	. . . BEADED INFLATION HANDLE	2	
-9	No Number	. . . ORAL INFLATION TUBE/VALVE	2	
-10	MIL-C-5040	. . . CORD, Nylon Type III	2	
-11	3335AS101-2	. . CASING COVER ASSEMBLY	1	
-12	V-F-106	. . . SLIDE FASTENER, Type III, Style I, LG 10 Heavy	1	
-13	No Number	. WAIST BELT ASSEMBLY	1	
-14	3335AS110-2	. . TRIGLIDE	1	
-15	3335AS110-1	. . SIDE RELEASE BUCKLE	1	
-16	3335AS110-3	. . LOOPLOC	1	
-17	No Number	. POUCH ASSEMBLY, Survival items	1	

Notes: 1. Top and bottom gaskets are obtained from Valve Stem Kit, P/N 105AS100-6, NIIN 00-113-8290, which contains one top and one bottom gasket.

2. Schrader-Bridgeport P/N 768 must be open purchased from:
Schrader-Bridgeport Intl
205 Frazier Rd
P.O. Box 668
Altivista, VA 24517
Phone (804) 369-8826

NUMERICAL INDEX

Part Number	Figure and Index Number	SM&R Code
MIL-C-601G	25-7-4	PAGZZ
MIL-C-5040	25-7-10	PAOZZ
ORAL VALVE	25-7-9	
POUCH	25-7-17	
V-F-106	25-7-12	PAGZZ
WAIST BELT	25-7-13	
105AS100-5	25-7-7	
3335AS101-1	25-7-1	PAOGG
3335AS101-2	25-7-11	PAGGG
3335AS104	25-7-2	
3335AS110-1	25-7-15	
3335AS110-2	25-7-14	
3335AS110-3	25-7-16	
67A319D18-1	25-7-6	
840AM	25-7-3	PAGZZ
849AM	25-7-5	
975AS121-11	25-7-8	PAGZZ